IN THE SPECIFICATION

Please amend the paragraph starting at line 3 from the bottom on page 17 of the specification as follows:

FIG. 1 is a schematic diagram illustrating a ~~bet~~ belt fixing device.

Please amend the paragraph starting at line 13 on page 30 of the specification as follows:

The dry toner for use in the present invention has a storage modulus G' and a loss modulus G", wherein the storage modulus G' is in the range from $5.5 \times 10x^5$ to 5.5×10^7 Pa at 80°C and is in the range from 5.0×10^2 to 1.0×10^4 Pa at 180°C, and a maximum of a loss tangent ($\tan\delta = G''/G'$) is in the range from 1.5 to 8.0 at temperature from 80°C to 130°C. The dry toner having these viscoelastic properties can ensure satisfactory releasability in the belt fixing system and can concurrently have a good transparency in OHP, in contrast to conventional equivalents. The present inventors consider the reasons ~~therefor~~ therefore as follows.

Please amend the paragraph starting at line 4 on page 33 of the specification as follows:

Specifically, the binder must have a sufficient viscosity at a temperature of 80°C to 130°C at which the toner begins to be fixed. The viscosity herein can be indicated by a loss tangent δ ($\tan\delta = G''/G'$). A toner having a maximum of loss tangent δ ($\tan\delta = G''/G'$) in the range of 1.5 to 8.0 at temperature of 80°C to 130°C has sufficient glossiness, as verified by experiment. If the maximum loss tangent is less than 1.5, the toner may not have sufficient glossiness. If it is more than 8.0, ~~wthe~~ the toner may not have satisfactory hot-offset resistance, although the toner may have sufficient glossiness.

Please amend the paragraph starting at line 4 on page 71 of the specification as follows:

Specific methods for applying an impact force are, for example, a method in which the impact force is applied to the mixed particles by using a rotated impeller blade in high speed, a method in which the mixed particles are placed in high-speed flow so as to subject the mixed particles or complex particles to be in a collision course with a suitable collision board. Examples of apparatus ~~therefor~~ therefore include angmill (available from Hosokawa Micron Corporation), a modified I-type mill (available from Nippon Pneumatic MFG., Co., Ltd.) which is reduced pulverizing air pressure, a hybridization system (available from Nara Machine Corporation), Kryptron System (available from Kawasaki Heavy Industries, Ltd.), and an automatic mortar.

Please amend the paragraph starting at line 6 on page 79 of the specification as follows:

In an image developing device 13 shown in FIG. 3[[(4)]], a power supply 17 applies a vibration bias voltage as developing bias, in which a direct-current voltage and an alternating voltage are superimposed, to a developing sleeve 15 during developing. The potential of background part and the potential of image part are positioned between the maximum and the minimum of the vibration bias potential. This forms an alternating field, whose direction alternately changes, at developing region 16. A toner and a carrier in the developer are intensively vibrated in this alternating field, so that the toner overshoots the electrostatic force of constraint from the developing sleeve 15 and the carrier, and leaps to the photoconductor 11. The toner is then attached to the photoconductor 11 in accordance with a latent electrostatic image thereon.

Please amend the paragraphs starting at line 3 on page 81 of the specification as follows:

FIG. 4[[5]] is a schematic diagram of an example of the image-forming apparatus having a contact charger. The photoconductor 11 to be charged as an image bearing member is rotated at a predetermined speed (process speed) in the direction shown with the arrow in the figure. The charging roller 12, which is brought into contact with the photoconductor 11, contains a core rod 28 and a conductive rubber layer 29 concentrically arranged on the core rod. The both ends of the core rod 28 are supported with bearings (not shown) so as to allow the charging roller 12 to rotate freely, and the charging roller 12 is pressed to the photoconductor 11 at a predetermined pressure by pressurizing means (not shown). The charging roller 12 in this figure therefore rotates along with the rotation of the photoconductor 11. The charging roller 12 is generally formed with a diameter of 16 mm in which a core rod 28 having a diameter of 9 mm is coated with a rubber layer 29 having a moderate resistance of approximately 100,000 Ω cm.

The power supply 27 shown in the figure is electrically connected to the core rod and supplies a predetermined bias to the core rod 28. Thus, the surface of the photoconductor 11 is uniformly charged at a predetermined polarity and potential.

Please amend the paragraph starting at line 18 on page 82 of the specification as follows:

FIG. 5 is a schematic diagram of another example of the image-forming apparatus having a contact charger. The photoconductor 11 as an object to be charged and image bearing member, is rotated at a predetermined speed (process speed) in the direction shown with the arrow in the figure. The brush roller 12' having a fur brush or magnetic brush is

brought in contact with the photoconductor 11, with a predetermined nip width and at a predetermined pressure with respect to elasticity of the brush part.

Please amend the paragraph starting at line 3 on page 83 of the specification as follows:

The fur brush roller 12' as the contact charger for use in the present invention has an outside diameter of 14 r m and a longitudinal length of 250 mm. In this fur brush, a tape with a pile of conductive rayon fiber REC-B (trade name, available from Unitika Ltd.), as a brush part 30, is spirally coiled around a metal core rod 28 having a diameter of 6 mm, which is also functioned as an electrode. The brush of the brush part 30 is of 300 denier/50 filament, and a density of 155 fibers per 1 square millimeter. This rolled[[role]] brush is once inserted into a pipe having an internal diameter of 12 mm with rotating in a certain direction, and is concentrically arranged relative to the pipe. Thereafter, the rolled[[role]] brush in, the pipe is left in an atmosphere of high humidity and high temperature so as to twist the fibers of the fur.

Please amend the paragraph starting at line 8 from the bottom on page 83 of the specification as follows:

The resistance of the fur brush roller 12' is 1×10^5 Ω at an applied voltage of 100 V. This resistance is calculated from the current obtained when the fur brush roller 12' is in contact with a metal drum having a diameter of 30 mm with a nip width of 3 mm, and a voltage of 100 V is applied thereon.

Please amend the paragraph starting at line 2 from the bottom on page 83 of the specification as follows:

The resistance of the fur brush roller 12' should be $10^4\ \Omega$ or more in order to prevent image imperfection caused by an insufficient charge at the charging nip part when the photoconductor to be charged happens to have low electric strength defects such as pin holes thereon and an excessive leak current therefore flows into the defects. It should be $10^7\ \Omega$ or less in order to sufficiently charge the surface of the photoconductor.

Please amend the paragraph starting at line 7 on page 84 of the specification as follows:

Examples of the material of the fur include, in addition to REC-B (trade name, available from Unitika Ltd.), REC-C, REC-M1, REC-M10 (trade names, available from Unitika Ltd.), SA-7 (trade name, available from Toray Industries, Inc.), Thunderon (trade name, available from Nihon Sanmo Dyeing Co., Ltd.), Belltron (trade name, available from Kanebo Gohsen, Ltd.), Clacarbo (trade name, available from Kuraray Co., Ltd.), a rayon fiber containing dispersed carbon, and Royal (trade name, available from Mitsubishi Rayon Co., Ltd.). The brush is of preferably 3 to 10 denier per fiber, 10 to 100 filaments, per bundle, and 80 to 600 fibers per square millimeter. The length of the fur is preferably 1 mm to 10 mm.

Please amend the paragraph starting at line 6 from the bottom on page 84 of the specification as follows:

The fur brush roller 12' is rotated in the opposite (counter) direction to the rotation direction of the photoconductor 11 at a predetermined peripheral speed (surface speed) and comes into contact with the photoconductor 11 with a speed difference. The power supply 27 applies a predetermined charging voltage to the fur brush roller 12' so that the surface of the photoconductor 11 is uniformly charged at a predetermined polarity and potential. In contact charge of the photoconductor 11 by the fur brush roller 12', charges are mainly directly

injected and the surface of the photoconductor 11 is charged at the substantially equal voltage to the applied charging voltage to the fur brush roller 12'.

Please amend the paragraph starting at line 8 on page 85 of the specification as follows:

The magnetic brush as a contact charger for use in the present embodiment is formed of magnetic particles. In the magnetic particles, Z-Cu ferrite particles having an average particle diameter of 25 μm and Z-Cu ferrite particles having an average particle diameter of 10 μin are mixed in a weight ratio of 1:0.05 so as to form ferrite particles having peaks at each average particle diameter, and a total average particle diameter of 25 μm. The ferrite particles are coated with a resin layer having a moderate resistance so as to form the magnetic particles. The contact charger comprises the above-mentioned coated magnetic particles, a non-magnetic conductive sleeve which supports the coated magnetic particles, and a magnet roller which is included in the non-magnetic conductive sleeve. The coated magnetic particles are disposed on the sleeve with a thickness of 1 mm so as to form a charging nip 5 mm wide with the photoconductor 11. The gap between the non-magnetic conductive sleeve and the photoconductor 11 is adjusted to approximately 500 μm. The magnetic roller is rotated so as to rotate the non-magnetic conductive sleeve at twice in speed relative to the peripheral speed of the surface of the photoconductor 11, and in the opposite direction to the photoconductor 11. Thus, the magnetic brush is uniformly in contact with the photoconductor 11.

Please amend the paragraph starting at line 8 on page 86 of the specification as follows:

FIG. 6 is a schematic diagram of an image forming apparatus according to the present invention which has a process cartridge 10 containing a toner. The process cartridge for use herein comprises two or more of components such as a photoconductor 11, charging unit (charger) 12, developing unit 13 and cleaning unit 14. These components are integrated as the process cartridge 10 which is detachable from a main body of an image forming apparatus such as a copier or a printer.

Please amend the paragraph starting at line 9 from the bottom on page 86 of the specification as follows:

In the image-forming apparatus of the present invention which has the process cartridge 10, the photoconductor 11 is rotated at predetermined peripheral speed. During the cycle of a rotation of the photoconductor 11, the charger 12 uniformly charges the photoconductor 11 at predetermined positive or negative potential, thereafter an image exposing system of, for example, slit exposure or laser beam scanning exposure applies light imagewise to the charged photoconductor 11. Thus, latent electrostatic images are sequentially formed on the circumferential surface of the photoconductor 11. The image developer develops the formed latent electrostatic images with the toner so as to form toner images, and then the transfer means sequentially transfer the toner images onto a transfer medium which is fed from a paper feeder to between the photoconductor 11 and the transfer means synchronously with the rotation of the photoconductor 11. The transfer medium bearing the transferred toner images is separated from the photoconductor, and is introduced to the fixer. The fixer fixes the transferred images onto the transfer medium so as to form a reproduction (copy) and then the copy is sent out from the apparatus, i.e., printed out. After transferring the toner image, cleaner removes the remained toner on the surface of the

photoconductor 11 so as to clean the surface. The charge of the photoconductor is then eliminated for another image formation.

Please amend the paragraph starting at line 5 on page 91 of the specification as follows:

A total of 1200 parts of water, 800 parts of carbon black Printex 35 (trade name, available from Degussa AG DBP oil absorbance: 42 ml/100-mg; pH: 9.5), and 1200 parts of a polyester resin was mixed in a Mitsui ~~Henschel Mixer~~ HENSCHEL MIXER (trade name, available from Mitsui Mining Co., Ltd.). The mixture was kneaded at 150°C for 30 minutes in a two-roll mill, was cold-rolled, was pulverized in a pulverizer and thereby yielded Master Batch 1.

Please amend the paragraph starting at line 4 on page 94 of the specification as follows:

Toner Matrix 1 (100 parts) and hydrophobic titanium oxide (0.7 part) were mixed in a ~~Henschel Mixer~~ HENSCHEL MIXER and thereby yielded Toner 1.

Please amend the paragraph starting at line 2 on page 100 of the specification as follows:

Next, 100 parts of Toner Matrix 5 and 0.5 part of a metal complex of salicylic acid Bontron E-84 (trade name, available from Orient Chemical Industries, Ltd.) as a charge control agent were mixed at 1,000 rpm in a ~~Henschel Mixer~~ HENSCHEL MIXER and was further mixed at 6,000 rpm in a Q Mixer (available from Mitsui Mining Co., Ltd.) to thereby apply the charge control agent to the surface of the toner matrix.

Please amend the paragraph starting at line 3 from the bottom on page 105 of the specification as follows:

Next, 100 parts of Toner Matrix 11 and 0.7 part of hydrophobic silica were mixed in a ~~Henschel Mixer~~ HENSCHEL MIXER and thereby yielded Toner 11.

Please amend the paragraph starting at line 6 from the bottom on page 106 of the specification as follows:

Next, 100 parts of the toner particles and 0.7 part of hydrophobic silica as an external additive were mixed in a ~~Henschel Mixer~~ HENSCHEL MIXER and thereby yielded Toner 12.

Please amend the paragraph starting at line 6 on page 107 of the specification as follows:

The solvent was removed from the filtrate by drying in ~~vacuo~~ vacuum, and the residual amount (B) of the resin component was determined. The residual amount (B) was the amount of THF soluble components.

Please amend the Table on page 111 of the specification as follows:

Table 1

	Weight average particle diameter Dv μm	Number average particle diameter Dn μm	Dv/Dn	SF-1	Particles with SF-1 of 160 or more (%)	Particles with SF-1 of 150 or more (%)	Particle Diameter of dispersed releasing agent μm	Dispersed particles of releasing agent	G' (80°C)	G' (180°C)	Maximum tan δ (80-130°C)	Preparation process
Example 1	4.8	3.9	1.23	107	1.2	4.3	0.88	Concentrated in the vicinity of surface	1.2x~~106~~ $\underline{10^{6}}$	2.1x~~103~~ $\underline{10^{3}}$	3.5	Wet granulation
Example 2	5.8	4.8	1.21	118	1.5	6.2	0.95	Concentrated in the vicinity of surface	1.3x~~106~~ $\underline{10^{6}}$	2.2x~~103~~ $\underline{10^{3}}$	3.6	Wet granulation
Example 3	6.8	6.3	1.08	125	1.5	7.7	0.94	Concentrated in the vicinity of surface	1.4x~~106~~ $\underline{10^{6}}$	2.3x~~103~~ 10^{3}	4.0	Wet granulation
Example 4	6.3	5.3	1.19	130	3.5	808	0.88	Concentrated in the vicinity of surface	1.1x~~106~~ $\underline{10^{6}}$	2.1x~~103~~ $\underline{10^{3}}$	3.2	Wet granulation
Example 5	3.5	3.0	1.17	116	0.4	3.2	0.96	Concentrated in the vicinity of surface	6.5x~~105~~ $\underline{10^{5}}$	6.7x~~102~~ $\underline{10^{2}}$	7.3	Wet granulation
Example 6	5.3	4.5	1.18	139	4.8	10.5	0.95	Concentrated in the vicinity of surface	4.5x~~106~~ $\underline{10^{6}}$	3.3x~~103~~ $\underline{10^{3}}$	2.2	Wet granulation
Example 7	3.9	3.4	1.15	155	8.7	28.5	0.76	Concentrated in the vicinity of surface	5.8x~~107~~ $\underline{10^{7}}$	7.8x~~103~~ $\underline{10^{3}}$	1.9	Wet granulation
Comp. Ex. 1	7.2	5.9	1.22	125	2.2	5.5	0.85	Uniformly dispersed in the toner	1.1x~~106~~ $\underline{10^{6}}$	2.5x~~103~~ $\underline{10^{3}}$	3.1	Wet granulation
Comp. Ex. 2	5.7	4.3	1.33	118	1.9	8.8	0.88	Uniformly dispersed in the toner	1.3x~~106~~ $\underline{10^{6}}$	2.1x~~103~~ $\underline{10^{3}}$	2.8	Wet granulation
Comp. Ex. 3	6.2	5.2	1.19	165	54.9	82.3	0.77	Concentrated in the core of toner	1.0x~~106~~ $\underline{10^{6}}$	2.0x~~103~~ $\underline{10^{3}}$	4.5	Wet granulation
Comp. Ex. 4	2.8	2.3	1.22	125	3.5	9.0	0.75	Exposed from the surface	6.2x~~105~~ $\underline{10^{5}}$	6.1x~~102~~ $\underline{10^{2}}$	6.6	Wet granulation
Comp. Ex. 5	6.5	4.8	1.35	120	3.2	7.8	0.65	Exposed from the surface	5.8x~~107~~ $\underline{10^{7}}$	7.8x~~103~~ $\underline{10^{3}}$	5.1	Spherical product of pulverized toner